

AMENDMENTS TO THE CLAIMS

Please amend claims 1, 4-5, 8, 10-12, 16, 21, 24-25, 28, 30-32, 36, 41, 44-45, 48, 50-52, and 56 as follows:

1. (Currently Amended) A computer-implemented method for virtualizing super-user privileges in a computer operating system including multiple virtual private servers, the method comprising:

associating a user with a first virtual private server, the first virtual private server comprising a first plurality of actual processes executing within the same operating system as a second plurality of actual processes comprising a second virtual private server;

designating the user as a virtual super-user;

intercepting a call to the operating system for which actual super-user privileges are required, the call made by a process located in the computer operating system, the process owned by the user; and

in response to the intercepted call to the operating system pertaining to the first virtual private server ~~associated with the user~~:

granting actual super-user privileges to the user; and

allowing execution of the call to the operating system.

2. (Previously Presented) The method of claim 1, further comprising:  
withdrawing the actual super-user privileges from the user after execution of the call to the operating system.

3. (Previously Presented) The method of claim 1, wherein designating comprises:  
assigning a virtual super-user identifier to the user.

4. (Currently Amended) The method of claim 3, wherein the virtual super-user  
identifier comprises a super-user identifier and an indication of the first virtual private server.

5. (Currently Amended) The method of claim 1, wherein designating comprises:  
assigning a user identifier to the user; and  
storing the user identifier and an indication of the first virtual private server of the user in  
a virtual super-user list.

6. (Previously Presented) The method of claim 1, wherein granting comprises:  
assigning a super-user identifier to the user.

7. (Previously Presented) The method of claim 1, wherein the intercepted call to the  
operating system comprises a call to the operating system for accessing a file.

8. (Currently Amended) The method of claim 7, wherein the intercepted call to the  
operating system pertains to the first virtual private server ~~associated with the user~~ when the file  
to be accessed is associated with the first virtual private server.

9. (Previously Presented) The method of claim 1, wherein the intercepted call to the  
operating system comprises a call to the operating system for terminating a process.

10. (Currently Amended) The method of claim 9, wherein the intercepted call to the operating system pertains to the first virtual private server ~~associated with the user~~ when the process to be terminated is associated with the first virtual private server.

11. (Currently Amended) The method of claim 1, wherein the intercepted call to the operating system comprises a call to the operating system for terminating all processes associated with the first virtual private server, the method further comprising:

identifying each process associated with the first virtual private server; and  
terminating each identified process.

12. (Currently Amended) The method of claim 11, wherein a data structure stores associations between processes and virtual private servers, and wherein identifying comprises:

identifying each process by its association with the first virtual private server in the data structure.

13.-15. (Cancelled)

16. (Currently Amended) The method of claim 1, further comprising:  
responsive to the intercepted call to the operating system not pertaining to the first virtual private server ~~associated with the user~~, disallowing execution of the call to the operating system.

17. (Previously Presented) The method of claim 1, further comprising:  
responsive to the intercepted call to the operating system comprising a call to the  
operating system for inserting a module into an operating system kernel,  
disallowing execution of the call to the operating system.

18. (Previously Presented) The method of claim 1, wherein allowing comprises:  
executing the call to the operating system.

19. (Previously Presented) The method of claim 1, wherein intercepting the call to the  
operating system comprises:  
loading a system call wrapper;  
saving a pointer to the call to the operating system; and  
replacing the pointer to the call to the operating system with a pointer to the system call  
wrapper, such that the system call wrapper is executed when the call to the  
operating system is invoked.

20. (Previously Presented) The method of claim 19, wherein the pointer to the first call  
to the operating system comprises a system call vector.

21. (Currently Amended) A computer program product for virtualizing super-user  
privileges in a computer operating system including multiple virtual private servers, the computer  
program product comprising:

program code for associating a user with a first virtual private server, the first virtual private server comprising a first plurality of actual processes executing within the same operating system as a second plurality of actual processes comprising a second virtual private server;

program code for designating the user as a virtual super-user;

program code for intercepting a call to the operating system for which actual super-user privileges are required, the call made by a process located in the ~~computer~~ operating system, the process owned by the user; and

program code for granting actual super-user privileges to the user, and allowing execution of the call to the operating system, in response to the intercepted call to the operating system pertaining to the first virtual private server ~~associated with the user~~.

22. (Previously Presented) The computer program product of claim 21, further comprising:

program code for withdrawing the actual super-user privileges from the user after execution of the call to the operating system.

23. (Previously Presented) The computer program product of claim 21, wherein program code for designating comprises:

program code for assigning a virtual super-user identifier to the user.

24. (Currently Amended) The computer program product of claim 23, wherein the virtual super-user identifier comprises a super-user identifier and an indication of the first virtual private server.

25. (Currently Amended) The computer program product of claim 21, wherein program code for designating comprises:

program code for assigning a user identifier to the user; and

program code for storing the user identifier and an indication of the first virtual private server ~~of the user~~ in a virtual super-user list.

26. (Previously Presented) The computer program product of claim 21, wherein program code for granting comprises:

program code for assigning a super-user identifier to the user.

27. (Previously Presented) The computer program product of claim 21, wherein the intercepted call to the operating system comprises a call to the operating system for accessing a file.

28. (Currently Amended) The computer program product of claim 27, wherein the intercepted call to the operating system pertains to the first virtual private server ~~associated with the user~~ when the file to be accessed is associated with the first virtual private server.

29. (Previously Presented) The computer program product of claim 21, wherein the intercepted call to the operating system comprises a call to the operating system for terminating a process.

30. (Currently Amended) The computer program product of claim 29, wherein the intercepted call to the operating system pertains to the first virtual private server ~~associated with the user~~ when the process to be terminated is associated with the first virtual private server.

31. (Currently Amended) The computer program product of claim 21, wherein the intercepted call to the operating system comprises a call to the operating system for terminating all processes associated with the first virtual private server, the computer program product further comprising:

program code for identifying each process associated with the first virtual private server;  
and  
program code for terminating each identified process.

32. (Currently Amended) The computer program product of claim 31, wherein an association data structure stores associations between processes and virtual private servers, and wherein program code for identifying comprises:

program code for identifying each process by its association with the first virtual private server in the association data structure.

33.-35. (Cancelled)

36. (Currently Amended) The computer program product of claim 21, further comprising:

program code for disallowing execution of the call to the operating system in response to the intercepted call to the operating system not pertaining to the first virtual private server ~~associated with the user.~~

37. (Previously Presented) The computer program product of claim 21, further comprising:

program code for disallowing execution of the call to the operating system in response to the intercepted call to the operating system comprising a call to the operating system for inserting a module into an operating system kernel.

38. (Previously Presented) The computer program product of claim 21, wherein program code for allowing comprises:

program code for executing the call to the operating system.

39. (Previously Presented) The computer program product of claim 21, wherein program code for intercepting the call to the operating system comprises:

program code for loading a system call wrapper;

program code for saving a pointer to the call to the operating system; and



program code for replacing the pointer to the call to the operating system with a pointer to the system call wrapper, such that the system call wrapper is executed when the call to the operating system is invoked.

40. (Previously Presented) The computer program product of claim 39, wherein the pointer to the first call to the operating system comprises a system call vector.

41. (Currently Amended) A system for virtualizing super-user privileges in a computer operating system including multiple virtual private servers, the system comprising: a virtual super-user designation module for associating a user with a first virtual private server, the first virtual private server comprising a first plurality of actual processes executing within the same operating system as a second plurality of actual processes comprising a second virtual private server, and for designating the user as a virtual super-user; and

a system call wrapper for intercepting a call to the operating system for which actual super-user privileges are required, the call made by a process located in the ~~computer~~ operating system, the process owned by the user, and, in response to the intercepted call to the operating system pertaining to the first virtual private server ~~associated with the user~~, granting actual super-user privileges to the user and allowing execution of the call to the operating system.

42. (Previously Presented) The system of claim 41, wherein the system call wrapper is further configured to withdraw the actual super-user privileges from the user after execution of the call to the operating system.

43. (Previously Presented) The system of claim 41, wherein the virtual super-user designation module is further configured to assign a virtual super-user identifier to the user.

44. (Currently Amended) The system of claim 43, wherein the virtual super-user identifier comprises a super-user identifier and an indication of the first virtual private server.

45. (Currently Amended) The system of claim 41, wherein the virtual super-user designation module is further configured to assign a user identifier to the user and store the user identifier and an indication of the first virtual private server ~~associated with the user~~ in a virtual super-user list.

46. (Previously Presented) The system of claim 41, wherein the system call wrapper is further configured to assign a super-user identifier to the user.

47. (Previously Presented) The system of claim 41, wherein the intercepted call to the operating system comprises a call to the operating system for accessing a file.

48. (Currently Amended) The system of claim 47, wherein the intercepted call to the operating system pertains to the first virtual private server ~~associated with the user~~ when the file to be accessed is associated with the first virtual private server.

49. (Previously Presented) The system of claim 41, wherein the intercepted call to the operating system comprises a call to the operating system for terminating a process.

50. (Currently Amended) The system of claim 49, wherein the intercepted call to the operating system pertains to the first virtual private server ~~associated with the user~~ when the process to be terminated is associated with the first virtual private server.

51. (Currently Amended) The system of claim 41, wherein the intercepted call to the operating system comprises a call to the operating system for terminating all processes associated with the first virtual private server, and wherein the system call wrapper is further configured to identify each process associated with the first virtual private server and terminate each identified process.

52. (Currently Amended) The system of claim 51, further comprising:  
an association data structure for storing associations between processes and virtual private servers, wherein the system call wrapper is further configured to identify each process by its association with the first virtual private server in the association data structure.

53.-55. (Cancelled)

56. (Currently Amended) The system of claim 41, wherein the system call wrapper is further configured to disallow execution of the intercepted call to the operating system in response to the intercepted call to the operating system not pertaining to the first virtual private server associated with the user.

57. (Previously Presented) The system of claim 41, wherein the system call wrapper is further configured to disallow execution of the intercepted call to the operating system in response to the intercepted call to the operating system comprising a call to the operating system for inserting a module into an operating system kernel.

58. (Previously Presented) The system of claim 41, wherein the system call wrapper is further configured to execute the call to the operating system.